

Before the  
Federal Communications Commission  
Washington, DC 20554

In the Matter of )

Creation of a Low Power )  
Radio Service )

MM Docket No. 99-25  
RM-9208  
RM-9208

To: Mass Media Bureau (Policy & Rules)

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COMMENTS

Crawford Broadcasting Company, by its attorney, respectfully  
submits the attached comments in the above-referenced proceeding.

Respectfully Submitted,

CRAWFORD BROADCASTING COMPANY

By

  
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April 20, 1999

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In the Matter of	)	
	)	MM Docket No. 99-25
	)	
Creation of a Low	)	RM-9208
Power Radio Service	)	RM-9242
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Comments of Crawford Broadcasting Company

The following comments are filed in response to the above-captioned Notice of Proposed Rulemaking in In Re: Creation of a Low Power Radio Service, MM Docket No. 99-25 ("Notice") by Crawford Broadcasting Company ("Crawford"). Crawford and its affiliates are licensees of 25 commercial broadcast stations.

I. General Comments

In the Notice, the Commission proposes to create a low power broadcast radio service using existing spectrum in the FM broadcast band. The Commission's stated purpose for the creation of this new service is to address unmet needs for community-oriented radio broadcasting, to foster opportunities for new radio broadcast ownership, and promote diversity in radio voices and program services<sup>1</sup>.

Crawford does not believe that the need exists for community-oriented radio broadcasting beyond what is currently available. Many existing stations do a credible job of providing programming dealing with local issues and needs.

Crawford in particular makes the microphones of its stations available for those who wish to express their views. "The Crawford Stand", Crawford's prime public affairs effort, airs a total of 59 times daily within the group's 25 stations. At the conclusion of each broadcast, we invite listeners to "tell us where you stand" and offer a toll-free number which listeners can call. Those that wish to air their views are allowed to do so, but despite this broad invitation, few respond.

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<sup>1</sup>Notice at 1.

Another way Crawford invites the public to its microphones is through the "Talent Search". Our stations aggressively recruit listeners to come to our studios to host programming during which they can express their views. Related Crawford efforts include "The 770 Soapbox", "Host For A Day", and "The Dialogue". While there is some response, it is anything but brisk. Even with our stations' broad reach in mostly major markets, the public is still reluctant to participate.

Beyond the opportunities available by over-the-air radio, the cable television operators in many communities have community-access channels on which community-oriented needs can be transmitted to households within the community.

Recent years have seen an increase in the published accounts of so-called "pirate" radio operators. There has been a good deal of press devoted to these individuals, both in the trade and mainstream press. While the proposal specifically excludes such individuals from participation in the proposed new service, Crawford questions whether this recent "pirate" activity has been used to some degree as an indicator of the need for such a new service. Much more study needs to be done to ascertain the need for this new service before any rulemaking is enacted.

Technical concerns are central to the issue of creation of any new service in the existing FM broadcast spectrum. The FM band is, by most standards, full. There are no additional channels available in or around most cities of significant size. The addition of new stations in these areas would have to encroach upon existing licensed operations. This amounts to "shoehorning", and we urge the Commission to carefully consider the effects this action will have on both existing broadcasters and listeners.

One established fact that has been apparent in radio communications since its earliest days is that a given signal has the potential to cause much more interference than it does to produce service. This is readily apparent on the AM band, where a signal of just a few watts that renders service over a very small area can produce interference over a much larger area. The same is true of signals in the FM broadcast band, and it was for this very reason that the currently-established engineering standards of allocation were adopted. Were those standards overly restrictive or unneeded, we ask why they were adopted in the first place. Crawford believes these standards

have served us well. Receiver designs and broadcast facilities based on these designs generally work very well. We urge the Commission to very carefully consider the great potential for interference that will result from the establishment of this new service, particularly in light of the very small areas<sup>2</sup> of service that will result.

In broadcasting's formative years, specifically in the early 1950s, the FCC chose to waive some of the established standards of allocation for the purpose of allowing more radio stations to come on the air and serve specific communities. This relaxation of the established and proven engineering standards of allocation was, in effect, a "lowering of the bar". The result was that while communities did receive new broadcast voices, a tremendous amount of interference was created. Many of the Commission's efforts over the last decade have been devoted to "cleaning up" the AM band. The expanded band, which is just now becoming populated with those that were chosen to migrate from regular band frequencies, was established for the specific purpose of removing some of the worst interferers from the regular band. Regarding the AM band, the Commission stated a short time ago that "...channel congestion, interference and low-fidelity receivers have taken their toll, dulling the competitive edge of this once vital service."<sup>3</sup> Crawford believes that the Commission would, by shoehorning the stations for a new service into the existing, fully-populated FM band, be creating a similar situation. There is no denying that channel congestion, interference and reduced fidelity of receivers (resulting from manufacturers' efforts to filter out interference) will result. We further believe that the Commission will, in the future, have to devote significant resources and efforts to "cleaning up" the interference created today. This may come sooner rather than later, with in-band on-channel (IBOC) implementation on the horizon. We strongly urge the Commission to consider these factors when contemplating this new service.

Finally, it appears to us that this rulemaking proceeding is proceeding at a pace that is inconsistent with its import and potential impact. The comment and reply comment periods are

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<sup>2</sup>Notice at 24 and 30.

<sup>3</sup>See MM Docket No. 87-267 Notice, released July 18, 1990, at 1.

simply too short to allow the public and industry to adequately deal with the issues. The technical issues are myriad, and a significant amount of time is needed to properly study and address each of them. Issues such as receiver performance in the presence of strong second- and third-adjacent channel signals and the effects of such signals on all the IBOC systems currently under development will require testing. Non-technical issues, such as the impact of the proposed primary LP1000 stations on existing translator and booster operations and the related public service issues, will require time to be researched. We note that other recent technically-complex proceedings have allowed 120 days for comment. In the case of the aforementioned review of the AM technical rules, more than three years was allowed so that all the technical issues could be thoroughly studied. Crawford encourages the Commission to extend the comment period by at least 60 days to allow time for these issues to be investigated, and to remain flexible should it be determined that additional time is needed to fully analyze the technical issues. To do otherwise is to proceed without all the pertinent facts.

While Crawford believes that the implementation of a low-power FM (LPFM) radio service is not needed and is technically ill-advised, should the Commission continue to pursue this effort, we have some specific comments that address issues raised in the Notice.

## II. Comments Regarding Relaxation of Second- and Third-Adjacent Channel Protections

Crawford strongly objects to the relaxation of second- and third-adjacent channel protections to existing full-service FM stations, and we strongly disagree with the Commission's statement that a small risk of interference from such is outweighed by improved service<sup>4</sup>. The specific circumstance cited affected a limited number of stations and still maintained significant adjacent-channel spacings. Allowing LPFM stations to locate without regard to second-adjacent channel spacing is an entirely different scenario.

While many receiver designs may arguably function properly in the presence of strong third-adjacent channel energy, we believe that most current-generation consumer FM receivers will suffer adverse effects in the presence of strong second-adjacent channel interference. "De-

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<sup>4</sup>Notice at 46.

sense”, which is the reduction in apparent receiver sensitivity due to a strong off-channel signal, is the most likely result of strong second-adjacent channel energy, and this would manifest itself as a “hole” within the otherwise contiguous coverage area of the affected station. This could possibly be mitigated to some degree by collocating the second-adjacent channel stations, but this would seem to be counterproductive in the case of most LPFM stations.

The presence of a second-adjacent channel signal more than 20 dB greater in amplitude than the LPFM’s signal within the center of its service area would no doubt degrade reception of the LPFM throughout the desired coverage area. Intermodulation products, both actual (spurious) and receiver-induced, would be another likely result of collocation and with the close (400 kHz) frequency separation, difficult to filter without degrading the performance of the individual stations. Such interference can significantly reduce the number of listeners that can receive a station’s signal. This phenomenon, the difficulties it causes and its treatment has been the object of much Commission attention over the years<sup>5</sup>.

Collocation would also be financially difficult because of the relatively high cost of premium tower space at existing broadcast sites. This runs contrary to the stated purpose of providing a low-cost means of serving neighborhoods and communities.

Existing spacing rules all but prevent these second-adjacent channel problems by maintaining second- and third-adjacent channel signals at or below 20 dB above the level of the protected station’s signal within the 60 dBu contour. Again, more study and field measurements are required to adequately assess the effect of strong second- and third-adjacent channel signals on various receivers, and to determine the actual maximum undesired to desired field strength ratio needed for unimpeded receiver performance.

The Commission asks whether tightened emissions limits would be called for should second-adjacent channel interference standards be abolished<sup>6</sup>. As we discussed generally above, we believe that the limiting factor will be in the receivers. We do not believe that tightened

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<sup>5</sup>See Memorandum Opinion & Order, FCC 91-3, adopted January 2, 1991.

<sup>6</sup>Notice at 53.

emissions limits would achieve any significant reduction in the potential for second-adjacent channel interference.

Crawford also asks the Commission to consider the amount of Compliance and Information Bureau (CIB) resources that will be required to deal with interference complaints resulting from locating LPFM stations close to second- and third-adjacent channel stations. From our own observations in recent months and years, these resources appear to be stretched already. When large numbers of listeners begin experiencing difficulty receiving the established broadcast stations they have been receiving without interference for perhaps years, will the CIB be prepared to deal with the complaints, and what solutions will CIB personnel offer the listeners?

IBOC implementation is a great unknown at this point. Despite current developer claims and early test data, we simply do not know what the effects of increased second- and third-adjacent channel interference would be on the IBOC systems now being developed. The industry has a tremendous opportunity here to make a quantum leap in the quality of broadcast signals. Crawford believes that permitting increased interference levels from second- and third-adjacent channel stations without first assessing the potential impact through actual field tests of IBOC receiving equipment would do a great disservice to the public. Clearly, much more study is needed. We urge the Commission to stay any action on second- and third-adjacent channel interference standards until such tests can be completed and the results analyzed.

### III. Comments on Ownership, Eligibility and Service

Should the Commission elect to institute a low-power radio service, Crawford believes that ownership and programming rules should be adopted in keeping with the stated purpose of local, community-oriented radio. Local ownership should be a prerequisite, and cooperative agreements should be prohibited. The national ownership limits should be one, which is the only possibility if local ownership is required. Further, we believe that involvement of the owner in day-to-day operations is an important element in local, community-oriented radio and as such, should be required.

Crawford believes that any such low-power radio service should be a non-commercial

service. Further, we believe that a significant amount of programming in such a service should be required to deal with items of public interest. Both of these factors are in keeping with the stated purpose of the proposed new service. We believe that LPFM stations, if these are to be called "broadcast" stations and operate in the broadcast band to which the public at large may listen, should be required to comply with existing EAS requirements as well as all service rules as they currently apply to full-service broadcast stations. Spectrum efficiency and public service would require that the same minimum operating schedule that applies to full-service broadcast stations should apply to LPFM stations.

There would be, we believe, a significant risk of trafficking in LPFM construction permits and as such, we encourage the Commission to institute measures to prevent such trafficking. A prohibition on transferral of LPFM construction permits would serve this purpose. The permitted construction period should be no greater than two years. License renewals should be required often enough to insure that performance requirements are being met. Callsigns should include the suffix "-LP" to distinguish for the public community-oriented LPFM stations from full-service broadcast stations.

#### IV. Conclusion

Crawford does not believe that there is a need for an additional community-oriented radio service. We believe that the needs of the public are well served by existing broadcast outlets. Citizens that desire a microphone can generally find one available, and the creation of an LPFM service in no way guarantees greater public access to the airwaves.

The rapid pace of this proceeding does not permit adequate study, testing and research of the many technical and public service issues involved. We urge the Commission to extend the comment and reply comment periods to allow for adequate testing, study and research.

We strongly feel that the elimination of third- and particularly second-adjacent channel protection requirements is ill-advised. If any relaxation is indicated, it must be based on careful study and field tests of actual consumer equipment. There is no other way to accurately assess the impact on the public. Further, the impact that such elimination or relaxation may have on IBOC



implementation is impossible to assess without field testing. Implementing such changes blindly will significantly hinder IBOC development and as such is contrary to the public interest.

Finally, should the Commission choose to implement an LPFM service, all the rules regarding ownership, eligibility, programming and service should be drafted with the stated purpose of local, community-oriented radio in mind. No rules governing this service should be adopted that do not serve this end, and this calls for required local ownership, owner participation, public interest programming, and non-commercial operation. Stations operating as such on broadcast frequencies should be called to abide by all the service rules and regulations that apply to other broadcast stations.

Respectfully submitted,



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February 16, 1999